

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1.-59. (Cancelled)

60. (Currently Amended) A plasma surface processing apparatus for processing a surface of a material to be processed with a processing gas plasmatized under an electric field, said apparatus having an electrode structure for generating said electric field, said electrode structure comprising:

a metallic electrode body having a plasma generating surface; and

~~a dielectric case provided as a solid dielectric layer disposed on said electrode body, said dielectric case including an integral~~ an integrally formed dielectric case body which has an opening and an internal space communicated to said opening, said electrode body being received in said internal space through said opening, said plasma generating surface being closely covered with said dielectric case body as dielectric layer thereof, said ~~integral~~ dielectric case body being provided with a protrusive end part on a side of said opening thereof, said protrusive end part being protruded relative to said electrode body.

61. (Currently Amended) An electrode structure according to claim 60, further comprising ~~wherein said dielectric case further includes:~~

a lid made of a solid dielectric material for closing said opening, an end part of said lid covering an end surface of said protrusive end part in a location more forward in a direction where said protrusive end part is protruded relative to said electrode body.

62. (Currently Amended) A plasma surface processing apparatus for processing a surface of a material to be processed with a processing gas plasmatized under an electric field, said apparatus having an electrode structure for generating said electric field, said electrode structure comprising:

an elongate metallic first electrode body having a first plasma generating surface;

~~a first dielectric case provided as a solid dielectric layer disposed on said first electrode body, said first dielectric case including an integral~~ an integrally formed dielectric first case body which has a first opening and a first internal space communicated to said first opening, said first electrode body being received in said first internal space through said first opening, said first plasma generating surface being closely covered with said first dielectric case body as dielectric layer thereof, said first ~~integral~~ dielectric case body being provided with a first protrusive end part on a side of said first opening thereof, said first protrusive end part being protruded relative to said first electrode body;

an elongate metallic second electrode body having a second plasma generating surface and extending in a same direction as said first electrode body; and

~~a second dielectric case provided as a solid dielectric layer disposed on said second electrode body, said second dielectric case including an integral~~ an integrally formed dielectric second case body which has a second opening and a second internal space communicated to said second opening, said second electrode body being received in said second internal space through said second opening, said second plasma generating surface being closely covered with said second dielectric case body as dielectric layer thereof, said second ~~integral~~ dielectric case body being provided with a second protrusive end part on a side of said second opening thereof, said second protrusive end part being protruded relative to said second electrode body,

said first dielectric case body and said second dielectric case body defining a gas passage in between, said gas passage allowing said processing gas to pass therethrough in a direction orthogonal to said direction in which said first electrode body and said second electrode body extend.

63. (Currently Amended) An electrode structure according to claim 62, wherein said first dielectric case body and said second dielectric case body are separately formed.

64. (Currently Amended) An electrode structure according to claim 63, wherein said first dielectric case body has an opposing surface abutted with said second dielectric case body, and said opposing surface is provided with a recess to serve as said gas passage.

65. (Currently Amended) An electrode structure according to claim 62, wherein said first dielectric case body and said second dielectric case body are integrally connected to one another.
66. (Previously Presented) An electrode structure according to claim 62, wherein flow passage sectional area of said gas passage varies along a direction of gas flow.
67. (Currently Amended) An electrode structure according to claim 62, wherein said first dielectric case body has a plate dividing said gas passage and said first internal space, and a thickness of said plate varies along a direction of gas flow in said gas passage.
68. (Previously Presented) An electrode structure according to claim 62, wherein a distance between said first electrode body and said second electrode body varies along a direction of gas flow in said gas passage.
69. (Currently Amended) An electrode structure according to claim 62, wherein said first dielectric case body is provided with a gas uniformizing passage for dispersing said processing gas uniformly in a direction in which said first electrode body extends and for introducing said processing gas into said flow passage.